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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,435	07/13/2004	Tatsuya Kato	890050.485USPC	7431
7590 03/23/2007 David V Carlson Seed Intellectual Property Law Group Suite 6300 701 Fifth Avenue Seattle, WA 98104-7092			EXAMINER PATEL, GAUTAM	
			ART UNIT 2627	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			03/23/2007	
			DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/501,435	Applicant(s) KATO ET AL.	
	Examiner Gautam R. Patel	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/13/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19 are pending for the examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

Election/Restriction [final]

3. No claims are withdrawn from further consideration at this time by the examiner, 37 C.F.R. § 1.142(b) as being drawn to non-elected embodiments and/or figs. 5. Election was made with traverse of claims 1-19.

Applicant's election with traverse of second embodiment of figure 10 and figures 1-4 and 6-11 in paper dated 2/20/07 is acknowledged.

The traversal is on the ground(s) that "the distinction between figures 9 and 10 is inappropriate".

The Applicants are correct. A typographical error was made with respect to figure numbers.

The specification pages 11-12 clearly indicates figures 4-7 as one embodiment and 10 is another embodiment [second] and also figure 11 to be still another [further] embodiment [third].

So First embodiment is fig. 4-7.

Second is fig. 10 and

Third is fig. 11.

It is not found persuasive at all that figure 10 and 11 are same embodiments [because specification itself says they are different].

However, to further the prosecution, figure 10, for time being is taken as the elected figure.

Further restriction in the future may be sent if the limitations of figure 11 [non-elected fig.] are to be incorporated into the claims.

The requirement is still deemed proper and is therefore made FINAL.

Action on all claims 1-19 follows.

Drawings/Objection

4. The drawings are objected for following reasons:

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims.

Therefore, steps of “setting recording powers of top pulse and recording information” must be shown [as steps] or the features cancelled from the claims.

No new matter should be entered.

Figure(s) 12 is/are not designated by a legend such as “Prior Art”. The legend is necessary in order to clarify what applicant's invention is (see MPEP § 608.02g).

Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must consist of following:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be *accompanied by a marked-up copy of one or more of the figures being amended, with annotations*. Any replacement drawing sheet *must be identified in the top margin as “Replacement Sheet”* and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. *Any marked-up (annotated) copy showing changes must be labeled “Annotated Marked-up Drawings” and accompany the replacement sheet in the amendment (e.g., as an appendix).*

a proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Correction may not be held in abeyance.

Correction are required.

Objection to Specification

5. The disclosure is objected for following reasons.

The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, 7, 12, 14, 16 and 18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Miyamoto et al., US. patent 6,236,635 (hereafter Miyamoto).

As to claim 1, Miyamoto discloses the invention as claimed [see Figs. 6 and 12] including setting recording powers and having second recording power lower than the first recording power, comprising the steps of:

the method of recording information to an optical recording medium comprises a step of setting recording powers of a top pulse and/or a last pulse of a laser beam used for forming at least one recording mark contained within said group to a second recording power [power P3 and P9] lower than a first recording power [power P7] which is a recording power of an intermediate pulse(s) between the top pulse and the last pulse, thereby recording information in the optical recording medium [col. 9, lines 12-28 and fig. 6].

7. The aforementioned claim 3, recites the following steps, inter alia, disclosed in Miyamoto:

the first recording power Pw1 and the second recording power Pw2 are set so that $Pw2/Pw1$ is smaller than 0.9 [col. 9, lines 12-28].

NOTE: Miyamoto discloses the range of this power to be 0.1 mw to 2.0 mw, which falls within the range of 0.9, thus satisfying 0.9 value.

8. The aforementioned claims 5 & 7, recites the following steps, inter alia, disclosed in Miyamoto:

a pulse width of a cooling pulse of the laser beam used for forming at least one recording mark contained within said group is set to wider than that of any pulse of the recording power [col. 9, lines 12-28; see figs. 6-7].

9. As to claims 12, 14, 16 and 18, they are apparatus claims corresponding to claims 1, 3, 1 and 3 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 1, 3, 1 and 3 respectively, above.

Claim Rejections - 35 U.S.C. § 103

10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 8-11, 13, 15, 17 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Miyamoto as applied to claims 1, 3, 5, 7, 12, 14, 16 and 18 above.

As to claim 2 Miyamoto discloses all of the above elements, including middle level pulse power level higher than the first and last pulse. Miyamoto does not specifically disclose [in this embodiment] that first and last pulse are set at equal power level to the extent claimed.

However, equal power level of first and last pulse are well known in the art for a long time. More importantly Miyamoto teaches power level of first and last pulse to be equal see fig. 3, power level P3 [col. 6, line 51 to col. 7, line 6].

One of ordinary skill in the art at the time of invention would have realized that from the suggestion given by Miyamoto that power level P3 [first pulse] and power level P9 [last pulse] can be same [col. 9, lines 18-19].

Therefore, it would have been obvious to have used equal power level for first and last pulse in the system of Miyamoto as taught by Miyamoto because one would be motivated to reduce number of parts that are required to produce pulses in the system of Miyamoto and provide faster signal controls and consolidate production of the waveforms thus making system less expensive.

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11. As to claims 4, 6 and 8, they are respectively rejected for the similar reasons set forth in the rejection of claims 3, 5 and 5 respectively above.

12. The aforementioned claim 9, recites the following steps, inter alia, disclosed in Miyamoto:

the pulse width of the cooling pulse is set to be equal to or wider than 1.0 T [see fig. 6; col. 9, lines 12-57].

13. The aforementioned claim 10, recites the following steps, inter alia, disclosed in Miyamoto:

a length of a shortest signal between neighboring recording marks is equal to or shorter than 30 ns [col. 6, lines 7-20].

14. The aforementioned claim 11, recites the following steps, inter alia, disclosed in Miyamoto:

the length of the shortest signal between neighboring recording marks is equal to or shorter than 20 ns [col. 6, lines 7-20].

15. As to claims 13, 15, 17 and 19, they are apparatus claims corresponding to claims 2, 3, 2 and 3 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 2, 3, 2 and 3 respectively, above.

Other prior art cited

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Seo (US. Patent Application 2002/0101808 A1) "Adaptive recording ...].
- b) Kando et al. (US. patent 6,678,28).

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Contact information

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.


GAUTAM R. PATEL
PRIMARY PATENT EXAMINER

3/20/07

Gautam R. Patel
Primary Examiner
Group Art Unit 2627

March 18, 2007